

**IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

ELECTRIC ENERGY, INC., et al.,)

Petitioners,)

v.)

**ENVIRONMENTAL)
PROTECTION AGENCY and)
MICHAEL S. REGAN,)
Administrator, United States)
Environmental Protection Agency,**)

Respondents.)

**Case No. 23-1035
(consolidated with
No. 23-1036, 23-1037,
23-1038)**

**MOTION OF SIERRA CLUB FOR LEAVE
TO INTERVENE ON BEHALF OF RESPONDENTS**

Pursuant to Federal Rules of Appellate Procedure 15(d) and 27, and Rule 15(b) and 27 of this Court, Sierra Club hereby respectfully moves to intervene in support of Respondents United States Environmental Protection Agency (“EPA”) and Michael S. Regan, EPA Administrator, in the above-captioned proceeding and with respect to any other petitions for review of EPA’s November 18, 2022 Denial of Alternative Closure Deadline for General James M. Gavin Plant, Cheshire, Ohio (“Gavin Denial”).¹ Counsel for Petitioners Utility Solid Waste Activities Group

¹ EPA, Final Decision, Denial of Alternative Closure Deadline for General James M. Gavin Plant, Cheshire, Ohio, Docket No. EPA-HQ-OLEM-2021-0590-0100

(“USWAG”), Electric Energy, Inc., *et al.*, Appalachian Power Company, *et al.*, and Gavin Power, LLC (“Gavin Power”), state that they take no position on the motion. Counsel for Respondent EPA states that the United States takes no position on the motion.

Sierra Club and its members are directly harmed by the unsafe and unlawful disposal of Coal Combustion Residuals (“CCR”) at the General James M. Gavin Plant (“Gavin Plant”). Sierra Club has been urging EPA for years to address coal ash-related pollution, including pollution from the Gavin Plant. Sierra Club brings a unique perspective to this matter, and its interests are not adequately represented by existing parties.

BACKGROUND

I. DAMAGE TO HUMAN HEALTH AND THE ENVIRONMENT FROM COAL ASH DISPOSAL

When power plants burn coal to generate electricity, much of the coal is converted into gases routed to smokestacks, but some of the coal remains as larger particles called CCR, or coal ash. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities, 80 Fed. Reg. 21,302, 21,303 (Apr. 17, 2015); *see also Util. Solid Waste Activities Grp. v. Env’t Prot. Agency* (“USWAG v. EPA”), 901 F.3d 414 (D.C. Cir. 2018). For

(Nov. 18, 2022), <https://www.regulations.gov/document/EPA-HQ-OLEM-2021-0590-0100>.

decades, the prevailing practice in the electric industry was to dispose of coal ash in unlined surface impoundments and landfills. 80 Fed. Reg. at 21,324. Power plants used water to convey coal ash to impoundments – effectively, giant holes in the ground – where the mixture of coal ash waste and water accumulated, with no liner to prevent additional water from infiltrating the waste, or to prevent the mixture of coal ash waste and water from leaking out of the impoundment and contaminating adjacent groundwater and surface waters. *See id* at 21,325. In addition, many existing impoundments were neither constructed nor maintained by qualified engineers. Not surprisingly, at the time of its rulemaking, EPA found that the structural stability of more than twenty-five percent of existing impoundments was poor or could not be determined. *Id.* at 21,315.

The Gavin Plant is one of the nation’s largest coal-burning power plants, and Gavin’s Fly Ash Reservoir (“FAR”) (300 acres) and Bottom Ash Pond (“BAP”) (57.8 acres) are among the largest coal ash impoundments in the U.S.² In comments submitted on EPA’s proposed denial of the application at issue here, Sierra Club and others expressed strong concerns over decades of unsafe handling of coal ash at the Gavin Plant. Among other things, these comments noted that the

² Comments of Earthjustice, Sierra Club, et al., on Proposed Denial of Alternative Closure Deadline for General James M. Gavin Plant, at 1-2, Docket No. EPA-HQ-OLEM-2021-0590 (Mar. 25, 2022), <https://www.regulations.gov/comment/EPA-HQ-OLEM-2021-0590-0064> (“Gavin Comments”).

FAR and BAP are unlined and in close proximity to the Ohio River and other water bodies and expressed concern over the discharge of wastewater into the Ohio River and other “enormous impacts” of the plant on the local community and environment.³

Coal naturally contains heavy metals and metal compounds such as arsenic, boron, cadmium, chromium, lead, mercury, selenium, and thallium. *USWAG v. EPA*, 901 F.3d at 421 (citing 80 Fed. Reg. at 21,449). These metals are concentrated in coal ash, which coal-burning power plants produce in staggering quantities. Even as an increasing number of such plants retire, an urgent need to address years of improper and unsafe disposal of coal ash remains.

The severe risks of this reckless approach to the disposal of toxic coal ash waste were made clear when an impoundment at the Tennessee Valley Authority’s Kingston Fossil Plant in Harriman, Tennessee failed catastrophically in 2008, sending more than one billion gallons of coal ash slurry crashing into homes, waterways, and the surrounding environment. 80 Fed. Reg. at 21,457 n.219. Since the Kingston disaster, other high-profile disasters have occurred, such as the spill of over 30,000 tons of coal ash and 27 million gallons of wastewater into the Dan River in North Carolina in 2014. Joint Factual Statement at 2, *United States v.*

³ *Id.* at 3-5.

Duke Energy Bus. Servs. LLC, No. 5:15-CR-62-H (E.D.N.C. May 14, 2015), ECF No. 56.

The improper disposal of toxic coal ash has wrought damage in other ways. Coal ash blows onto nearby properties, coating homes in toxic dust and forcing residents to breathe toxic coal ash dust. *See* 80 Fed. Reg. at 21,386. At scores of sites, toxins in coal ash have leaked out of unlined landfills and impoundments and into the groundwater that people drink and into surface water, such as rivers, streams, seas, and estuaries. Hazardous and Solid Waste Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From Electric Utilities, 75 Fed. Reg. 35,128, 35,204, 35,234-39 (June 21, 2010). The chemicals in coal ash increase cancer risk and can cause other adverse health impacts including neurological, cardiovascular, and gastrointestinal problems. 80 Fed. Reg. at 21,450. Selenium in coal ash has poisoned dozens of aquatic environments and killed or impaired fish, amphibians, and the wildlife that feed on them. Selenium bioaccumulates, so damage is long-lasting and often lethal. *Id.* at 21,363, 21,450.

II. THE COAL ASH RULE AND ITS IMPLEMENTATION

In response to the overwhelming evidence that unsafe coal ash disposal poses serious risks to human health and the environment, EPA first promulgated national CCR regulations in 2015. 80 Fed. Reg. at 21,302. The 2015 CCR Rule

was long overdue; EPA adopted it only after a federal court ordered EPA to comply with its obligations under the Resource Conservation and Recovery Act (“RCRA”) to regulate coal ash as a solid waste. *See Appalachian Voices v. McCarthy*, 989 F. Supp. 2d 30 (D.D.C. 2013). At the time EPA issued the 2015 rule, many states had few or no requirements for the safe disposal of coal ash and those that did exist were often inadequate and unenforced.

The 2015 rule established national minimum health and safety criteria for coal ash disposal units, including: location restrictions; design and operating criteria; groundwater monitoring, corrective action, closure, and post-closure requirements; and recordkeeping, notification, and disclosure obligations. 80 Fed. Reg. at 21,302 (codified at 40 C.F.R. Pt. 257, Subpt. D). Among other provisions, the 2015 rule required that unlined coal ash impoundments initiate closure or retrofit within six months of determining that groundwater pollution is present at statistically significant levels above groundwater protection standards. *Id.* at 21,418. It further required that all impoundments – lined or unlined – initiate closure within six months if their owners or operators do not demonstrate that their bases lie at least five feet above the uppermost aquifer. *Id.* at 21,361.

III. LITIGATION OVER THE 2015 RULE AND SUBSEQUENT LEGISLATION AND EPA RULEMAKING

Multiple parties petitioned this Court for review of the 2015 CCR Rule, including the Sierra Club, as part of a coalition of environmental groups, and

groups representing industry, including Petitioner USWAG. On August 20, 2018, this Court issued its decision, which held (*inter alia*) in favor of the environmental group petitioners that the 2015 rule’s provision allowing unlined impoundments to continue to operate was unlawful because it failed to guarantee “no reasonable probability of adverse effects on health or the environment” as required by RCRA section 4004(a), 42 U.S.C. § 6944(a). *USWAG*, 901 F.3d at 431. The Court partially vacated the 2015 rule, on this and other grounds, and remanded the rule back to EPA. *Id.* at 426-34.

In addition, while the *USWAG* litigation was pending, Congress in 2016 enacted the Water Infrastructure Improvements for the Nation Act (“WIIN Act”), Pub. L. No. 114-322, 130 Stat. 1628 (2016), which: included an amendment to RCRA that authorized states to apply to EPA for the authority to administer CCR permitting programs; authorized EPA to establish a federal CCR permitting program; and granted EPA enforcement authority over CCR. 42 U.S.C. § 6945(d).

Prompted in part by this Court’s *USWAG* remand and in part by Congress’ adoption of the WIIN Act, EPA engaged in several additional rulemakings between 2018 and 2020 to revise CCR Rule regulations.⁴ Among the 2020

⁴ EPA, Disposal of Coal Combustion Residuals from Electric Utilities Rulemakings, <https://www.epa.gov/coalash/coal-ash-rule> (last accessed Mar. 16, 2023) (describing the Phase One, Phase Two, Part A, Part B, and Legacy CCR Surface Impoundments rulemakings).

rulemakings was a “Part A” Revision to the CCR Rule, which allowed owners and operators of unlined surface impoundments to seek extensions of the deadline to begin closing the impoundment. To receive such an extension, an owner/operator would need to show that it was technically infeasible for them to secure alternate disposal capacity before the deadline and demonstrate that the facility was otherwise “in compliance with all of the requirements” of the CCR Rule. 40 C.F.R. § 257.103(f)(1). Gavin Power applied for a Part A extension at the Gavin Plant and EPA’s Final Decision denying the application is at issue in the present matter.

IV. EPA’S JANUARY 11, 2022 PROPOSED DECISIONS AND COMPLIANCE LETTERS TO ENFORCE THE CCR RULE

On January 11, 2022, EPA issued several proposed decisions and compliance letters that represented the first time EPA had taken concrete steps to enforce the 2015 CCR Rule since its promulgation. EPA’s January 11, 2022 actions included:

- Determining that, of the fifty-seven pending Part A applications that utilities submitted for extensions of the deadline to begin closing unlined surface impoundments, fifty-two applications were complete;⁵
- Proposing for public comment decisions on four of the fifty-two

⁵ EPA, Coal Combustion Residuals (CCR) Part A Implementation (Nov. 28, 2022), <https://www.epa.gov/coalash/coal-combustion-residuals-ccr-part-implementation>.

complete Part A applications, including three proposed extension denials, one of which was a proposed denial of the Part A application for the Gavin Plant (the other two were for the Clifty Creek plant in Indiana and the Ottumwa plant in Iowa) and one proposed conditional approval (at the H.L. Spurlock plant in Kentucky), based on the factors articulated in the CCR regulations, see 40 C.F.R. § 257.103(f);⁶

- Determining that seven pending applications that utilities submitted under the 2020 “Part B” revision to the CCR Rule⁷ for “alternative liner demonstrations” were complete;⁸
- Sending compliance assistance letters to the owners and operators of three sites (Beckjord in Ohio, Gallagher in Indiana, and AES in Puerto Rico) and one “Notice of Potential Violations” to the owner and operator of the Tecumseh site in Kansas based on EPA’s identification of specific deficiencies with each site’s compliance with CCR regulations;⁹ and

⁶ EPA, EPA Takes Key Steps to Protect Groundwater from Coal Ash Contamination (Jan. 11, 2022), <https://www.epa.gov/newsreleases/epa-takes-key-steps-protect-groundwater-coal-ash-contamination>.

⁷ Hazardous and Solid Waste Management System: Disposal of CCR; A Holistic Approach to Closure Part B: Alternate Demonstration for Unlined Surface Impoundments, 85 Fed. Reg. 72,506 (Nov. 12, 2020).

⁸ EPA, Coal Combustion Residuals (CCR) Part B Implementation (Feb. 28, 2023), <https://www.epa.gov/coalash/coal-combustion-residuals-ccr-part-b-implementation>.

⁹ Elec. Energy Petition for Review, Attach. C, D, E, F, Case No. 22-1056 (D.C. Cir. Apr. 8, 2022).

- Sending a letter to the Georgia Environmental Protection Division, requesting that it review its pending and issued state CCR permits to determine whether they comply with the CCR Rule's performance standards for the closure in-place of CCR units.¹⁰

V. EPA'S NOVEMBER 18, 2022, FINAL DECISION DENYING GAVIN POWER, LLC'S EXTENSION APPLICATION UNDER PART A OF THE CCR RULE.

During the comment period following EPA's proposed denial of Gavin Power's Part A application, Sierra Club and several other organizations submitted comments supporting the proposed denial. Commenters expressed serious concern over Gavin Power's handling of CCR at the site and the risks it posed to the nearby groundwater and surface waters, environment, and people.¹¹

On November 18, 2022, EPA issued a Final Decision denying Gavin Power's application for an extension of the deadline to begin closure at one of its surface impoundments, the BAP.¹² EPA found that Gavin Power had failed to meet several of the requirements for receiving a Part A extension. Among other things, EPA found that Gavin Power:

- Failed to demonstrate that it closed another impoundment, the FAR, in a

¹⁰ *Id.* at Attach. B.

¹¹ Gavin Comments.

¹² Gavin Denial at 1.

manner consistent with CCR Rule requirements.¹³ Among other things, EPA found that the closed FAR “could be sitting in groundwater as much as 64 feet deep;”¹⁴

- Failed to demonstrate that it was in compliance with groundwater monitoring requirements for the FAR, the BAP, and a Residual Waste Landfill at the site; and
- Failed to provide a detailed plan of the “fastest technically feasible schedule” for developing alternative capacity for non-CCR waste streams at the site.¹⁵

Petitioners filed their petitions for review with this Court on February 16, 2023.

ARGUMENT

Under Federal Rule of Appellate Procedure 15(d), a motion to intervene need contain only “a concise statement of the interest of the moving party and the grounds for intervention.” Fed. R. App. P. 15(d); *see Synovus Fin. Corp. v. Bd. of Governors of the Fed. Reserve Sys.*, 952 F.2d 426, 433 (D.C. Cir. 1991). As explained below and shown by the attached declarations, Petitioners challenge EPA’s actions related to environmental and health threats from the unsafe disposal of coal ash at sites that harm the interests of Sierra Club and its members. Sierra

¹³ *Id.* at 5.

¹⁴ *Id.* at 15.

¹⁵ *Id.* at 5.

Club has a strong interest in the expedient and effective mitigation of these threats, which industry Petitioners now seek to undermine and delay.

I. SIERRA CLUB’S STATEMENT OF INTEREST AND GROUNDS

Sierra Club has members throughout the country who live near coal ash sites and are threatened by improper disposal. Declaration of Neil Waggoner ¶ 15.

Sierra Club member Marianne Barte lives approximately four miles from the Gavin Plant in a home she has lived in since 1996. Ms. Barte is concerned that her drinking and household water is being contaminated by pollutants leaching from improperly stored coal ash at the Gavin Plant. Declaration of Marianne Barte, ¶¶ 3-5. Based on conversations she has had with her water provider, and her review of publicly available information, Ms. Barte believes that her household water is collected from groundwater wells that are within the Ohio River Valley Aquifer and four to six miles downriver from the coal ash ponds at the Gavin Plant. *Id.* ¶ 5.

Ms. Barte is aware of the health risks of coal ash. *Id.* ¶ 8. She is concerned that the non-compliance found by EPA at the Gavin Plant – including sixty-four vertical feet of coal ash waste in ongoing contact with groundwater – has and will continue to contaminate her water if Petitioners are successful in challenging EPA’s decision. *Id.* ¶¶ 7, 12. Because of her concerns, Ms. Barte filters her drinking water at home, but worries about the limited effectiveness of filtration as well as the potential health impacts from using unfiltered water in her garden and

for other household purposes. *Id.* ¶ 9.

On behalf of its members, for more than a decade Sierra Club has worked for proper disposal of coal ash as part of its organizational purpose to “protect and restore the quality of the natural and human environment.” Waggoner Decl. ¶¶ 5, 7. Sierra Club, along with several other groups, submitted comments on EPA’s proposed coal ash rule in 2010 and litigated to protect and strengthen the CCR Rule after it was passed in 2015. *Id.* ¶¶ 8, 10. Sierra Club has also worked for over a decade to address concerns about coal-ash related pollution from the Gavin Plant in particular. This includes submitting comments on a proposed permit related to the plant’s discharge of coal ash-contaminated wastewater. It also includes submitting comments on EPA’s proposed denial of the Gavin Power application at issue in the present preceding.¹⁶

Sierra Club seeks to intervene to oppose any attempts by Petitioners to undermine or delay EPA’s efforts to ensure effective remediation of environmental and health threats from coal ash disposal at the Gavin Plant. *Id.* ¶ 15. As noted above, the Gavin Plant has been found to be in non-compliance with several requirements of the CCR Rule that are designed to protect human health and the

¹⁶ See Declaration of Thomas Cmar, Ex. A, Comments of Earthjustice, Sierra Club, *et al.*, on Draft National Pollutant Discharge Elimination System Permit for Ohio Power Company General James M. Gavin Plant, Permit No. 1IB00006*ND (Feb. 7, 2014).

environment.

Beyond the Gavin Plant, Sierra Club has members close to coal ash sites throughout the country who also could be harmed by any ruling that delays or weakens CCR Rule enforcement. *Id.* ¶¶ 15-16. Sierra Club is an Intervenor-Respondent in another matter brought by several of the Petitioners in this matter before this Court, *Elec. Energy, et al., v. EPA* (Case No. 22-1056), in which they claim that EPA’s January 11, 2022 actions described above constitute an illegal rulemaking. A similar claim may be brought in the present matter and would threaten to harm Sierra Club members across the country who live proximate to coal ash sites, as well as the environment around those sites.

For the foregoing reasons, Sierra Club has an “interest” in this matter within the meaning of Federal Rule of Appellate Procedure 15(d). Furthermore, Sierra Club satisfies the requirements of Article III and prudential standing (should such a demonstration be necessary for parties who, as here, seek to intervene in support of respondents¹⁷). *See, e.g., Friends of the Earth v. Laidlaw Env’t Servs.*, 528 U.S.

¹⁷ *See, e.g., Old Dominion Elec. Coop. v. FERC*, 892 F.3d 1223, 1232 (D.C. Cir. 2018) (“[A]ll would-be intervenors must demonstrate Article III standing.”); *Ctr. for Biological Diversity v. Regan*, 539 F. Supp. 3d 136, 140 (D.D.C. 2021); *Deutsche Bank Nat’l Trust Co. v. Fed. Deposit Ins. Corp.*, 717 F.3d 189, 193-94 (D.C. Cir. 2013); *Def. of Wildlife v. Perciasepe*, 714 F.3d 1317, 1323 (D.C. Cir. 2013). *But see Little Sisters of the Poor Saints Peter & Paul Home v. Pennsylvania*, 140 S. Ct. 2367, 2379 (2020) (finding that the Third Circuit erred by inquiring into Movant’s independent Article III standing where another party had

167, 183-84 (2000) (environmental group has standing to enforce pollution limits where members have reasonable concerns about adverse effects of pollution in the areas they use); *Crossroads Grassroots Pol’y Strategies v. Fed. Election Comm’n*, 788 F.3d 312, 317 (D.C. Cir. 2015) (an intervenor seeking to support agency action establishes standing “where a party benefits from agency action, the action is then challenged in court, and an unfavorable decision would remove the party’s benefit.”); *Nat’l Parks Conservation Ass’n v. Manson*, 414 F.3d 1, 4-7 (D.C. Cir. 2005) (conservation groups with members in affected area have standing to challenge action that would facilitate increased air pollution in area); *Sierra Club v. EPA*, 129 F.3d 137, 139 (D.C. Cir. 1997) (environmental group with members in affected areas has standing to challenge weakening of Clean Air Act requirements for such areas).

II. SIERRA CLUB’S INTERVENTION IS WARRANTED

Sierra Club’s interests would not be adequately represented in the absence of intervention. *Cf. Dimond v. District of Columbia*, 792 F.2d 179, 192-94 (D.C. Cir.

already demonstrated standing for the same claim of relief sought); *Bond v. United States*, 564 U.S. 211, 217 (2011) (Article III requirements apply to those “who seek[] to initiate or continue proceedings in federal court,” not to those who defend against such proceedings); *McConnell v. Fed. Election Comm’n*, 540 U.S. 93, 233 (2003) (where the position of the respondent-intervenors is identical to that of the agency and the agency’s standing is unquestionable, no separate inquiry regarding intervenor standing is necessary), *overruled on other grounds by Citizens United v. Fed. Election Comm’n*, 558 U.S. 310 (2010).

1986). Without Sierra Club's intervention, the Court will hear only EPA's arguments in response to Petitioners. This Court "ha[s] often concluded that governmental entities do not adequately represent the interests of aspiring intervenors." *Fund for Animals, Inc. v. Norton*, 322 F.3d 728, 736 (D.C. Cir. 2003); *see also Nat. Res. Def. Council v. Costle*, 561 F.2d 904, 912-13 (D.C. Cir. 1977).¹⁸

This is especially true here. As noted above, Sierra Club has at times found itself in disagreement with EPA over how quickly coal ash disposal sites should be closed and remediated and over what level of remediation should be required. Sierra Club has urged EPA for years to take action to implement and enforce the CCR Rule at sites across the country, including the Gavin Plant at issue in this proceeding. As part of this advocacy, Sierra Club has published reports, commented on rulemakings and proposed EPA decisions, and engaged in litigation. *See Waggoner Decl.* EPA's interpretation of the factual and legal issues in this case may differ from Sierra Club's interpretation, as it has in the past. Sierra Club has advocated for additional remedial actions at the Gavin Plant beyond what both EPA and the companies have already found to be necessary.¹⁹

¹⁸ This Court has permitted Sierra Club to intervene in support of EPA in previous litigation where a petitioner sought to weaken the Coal Ash Rule. *See USWAG v. EPA; Elec. Energy et al., v. EPA*, Case No. 22-1056 (D.C. Cir. 2022).

¹⁹ *See, e.g.,* Gavin Comments at 7-13 (arguing that the Reclaim Pond at the Gavin Plant should also be considered subject to the CCR Rule, a position not shared by Gavin Power or EPA).

Sierra Club and other environmental organizations also filed a successful lawsuit against EPA to set a deadline for issuance of the CCR Rule, *Appalachian Voices v. McCarthy*, 989 F. Supp. 2d 30 (D.D.C. 2013); *Appalachian Voices v. McCarthy*, 38 F. Supp. 3d 52 (D.D.C. 2014), and, as noted above, successfully litigated a challenge to certain provisions of the rule as unlawfully weak. *See USWAG v. EPA*. Sierra Club and other organizations also petitioned for review of EPA's Part A revisions to the CCR Rule, a case that is still pending before this Court. *See Labadie Env't Org. v. EPA*, Case No. 20-1467 (D.C. Cir. 2020). For all of the above reasons, Sierra Club cannot rely on EPA to make all the arguments that it believes should be advanced to protect its and its members' interests.

Furthermore, Sierra Club respectfully submits that its views on the arguments advanced by Petitioners will be of assistance to the Court. A party seeking to intervene "may also be likely to serve as a vigorous and helpful supplement to EPA's defense." *Nat. Res. Def. Council*, 561 F.2d at 912-13. Sierra Club, with members living and working near the Gavin Plant and other sites polluted by coal ash or at risk of contamination from coal ash, offers a perspective different from the one EPA is likely to provide.

Sierra Club's participation as intervenor in support of EPA will not delay the proceedings or prejudice any party. This motion to intervene is timely filed within the thirty-day period allowed under Federal Rule of Appellate Procedure 15(d).

The Court has not yet established a schedule for merits briefing or oral argument. As a result, Sierra Club's participation will not undermine the efficient and timely adjudication of this case.

CONCLUSION

In sum, Sierra Club meets the requirements for intervention. The organization and its members have interests relating to the subject matter of this action and legitimate grounds for seeking to participate in the case. This motion is also timely filed and granting it will not delay the proceedings or prejudice any party. Accordingly, Sierra Club respectfully requests leave to intervene in Case Nos. 23-1035, 23-1036, 23-1037, and 23-1038, and in any other cases that may be consolidated with this proceeding in the future.

Dated: March 17, 2023

Respectfully submitted,

/s/ Thomas Cmar

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Counsel for Sierra Club

CERTIFICATE OF COMPLIANCE

Pursuant to Federal Rules of Appellate Procedure 27 and 32(g)(1), the undersigned counsel for Movants certifies that this motion complies (1) with the type-volume limitation of Federal Rule of Appellate Procedure 27(d)(2)(A) and D.C. Circuit Rule 27(a)(2) because it contains 3,970 words and (2) with the typeface and type-style requirements of Federal Rules of Appellate Procedure 27(d)(1)(E) and 32(a)(5)-(6) because it has been prepared using Microsoft Office Word for Office 365 and is set in Times New Roman font in a size equivalent to 14 points or larger.

Dated; March 17, 2023

/s/ Thomas Cmar
Thomas Cmar

CORPORATE DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure and D.C. Circuit Rule 26.1, Movant-Intervenor Sierra Club states that it is a non-profit advocacy organization dedicated to the protection of public health and the environment. It has no outstanding shares or debt securities in the hands of the public, nor any parent, subsidiary, or affiliate that has issued shares or debt securities to the public.

/s/ Thomas Cmar
Thomas Cmar

CERTIFICATE OF PARTIES

Pursuant to D.C. Circuit Rules 27(a)(4) and 28(a)(1)(A), I certify that the parties, intervenors, and amici in these consolidated cases are:

Petitioners: Electric Energy, Inc., Luminant Generation Company LLC, Coletto Creek Power, LLC, Miami Fort Power Company LLC, Zimmer Power Company LLC, Dynegy Midwest Generation, LLC, Illinois Power Generating Company, Illinois Power Resources Generating LLC, Kincaid Generation LLC.

Respondents: United States Environmental Protection Agency and Michael S. Regan, Administrator, United States Environmental Protection Agency.

Movant-Intervenor in Support of Petitioners: There are no Movant-Intervenors in support of Petitioners at the time of filing.

Movant-Intervenor in Support of Respondent: Sierra Club.

Amici: There are no amici curiae at the time of filing.

Dated: March 17, 2023

/s/ Thomas Cmar
Thomas Cmar

CERTIFICATE OF SERVICE

I hereby certify that on this 17th day of March, 2023, I served the foregoing Motion of Sierra Club to Intervene on Behalf of Respondents on all registered counsel through the Court's electronic filing system.

/s/ Thomas Cmar
Thomas Cmar

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STANDING DECLARATIONS ADDENDUM

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UNITED STATES ENVIRONMENTAL
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No. 23-1035

DECLARATION OF NEIL WAGGONER

I, Neil Waggoner, declare and state as follows:

1. My name is Neil Waggoner. I am over 18 years of age, and I am competent to give this declaration. The information in this declaration is based on my personal knowledge, information, and belief.
2. I am the Deputy Director of Federal Energy Campaigns and have held this position since December 2022. I have been working on behalf of the Sierra Club since 2012. From 2017 until I assumed my current role I was the Ohio Senior Campaign Representative for the Sierra Club Beyond Coal Campaign. In that role I

was responsible for overseeing the Campaign's operations in Ohio, including directing organizing and volunteer efforts, communicating with members and the general public about the environmental impact of fossil fuel power plants, researching power plant operations within the state, monitoring pollution data, and planning, carrying out, and monitoring litigation in Ohio on behalf of the Club.

3. Through my membership and my work, I am familiar with Sierra Club's general goals, its current projects, and its membership information, as well as its activities to address disposal sites for coal combustion wastes and the status of federal regulation concerning coal combustion wastes under the Resource Conservation and Recovery Act.

4. Sierra Club is a national non-profit organization founded in 1892 and incorporated in the State of California as a Nonprofit Public Benefit Corporation. Sierra Club has more than 780,000 members nationwide, including many members in Indiana, Iowa, Kansas, Ohio, and Puerto Rico.

5. Sierra Club's mission is: "to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives."

6. To this end, Sierra Club is engaged in a nationwide campaign to reduce dependence on coal-fired power. Sierra Club is currently litigating to force the clean up or retirement of existing coal plants across the country. Sierra Club is leading advocacy efforts to require the reduction of greenhouse gas emissions and is collaborating with state and local governments to promote energy efficiency, conservation, and increased reliance on renewable energy.

7. As part of this campaign, for over ten years, Sierra Club has worked at both the local and national levels to address the ongoing problem of water and air quality impairment from coal ash landfills and impoundments. The Club's advocacy has involved efforts to close and clean up existing coal ash disposal sites, including litigation involving discharges from those sites into ground or surface water.

8. In 2010, the Sierra Club, along with a number of other environmental groups, submitted comments to the U.S. Environmental Protection Agency ("EPA") on its proposed coal ash rule, which provided extensive information about volumes and nature of the waste, the significant risk to human health and the environment, the gross deficiencies of current state regulatory programs and the substantial documented damage that has occurred throughout the United States from mismanaged coal ash.

9. Since 2010, Sierra Club has continued to work for greater protection from the unsafe dumping of coal ash. For example, in May 2014, the Sierra Club published “Dangerous Waters: America’s Coal Ash Crisis,” which consists of eight reports highlighting the lax state regulation and dangerous disposal practices and contamination found in North Carolina, Kentucky, Missouri, Virginia, New Mexico, Montana, Indiana, and Illinois.

10. After EPA finalized the coal ash rule in 2015, Sierra Club, along with other organizations, challenged some aspects of the rule and defended other provisions in the D.C. Circuit Court of Appeals. It is my understanding that the Court ruled in Sierra Club’s favor on several issues where the Club argued that the rule needed to be strengthened and largely rejected industry arguments that were aimed at weakening the rule. Sierra Club has continued to advocate for enforcement of the requirements set forth in the federal rule.

11. On January 11, 2022, EPA proposed to deny requests made by the operators of three coal plants (Clifty Creek in Indiana, James M. Gavin in Ohio, and Ottumwa in Iowa) for extension of deadlines by which those operators must cease disposing of waste in their ash ponds. The Sierra Club submitted comments in support of EPA’s proposed determinations, which marked the first step by EPA toward enforcement of the rule.

12. On January 11, 2022, EPA also sent letters to four other facilities (AES in Puerto Rico and three closed plants – Beckjord in Ohio, Tecumseh Energy in Kansas, and Gallagher in Indiana) informing operators of those facilities that their ash pond closure plans do not meet the requirements of the federal coal ash disposal rule.

13. On November 22, 2022, EPA issued a final determination denying a request by Gavin’s owners to delay the closure of a coal ash impoundment, called the Bottom Ash Pond, at the Gavin site.

14. It is my understanding that, on February 16, 2023, Gavin Power, LLC, Utility Solid Waste Activities Group, a group of American Electric Power affiliates, and a group of Vistra affiliates sought to challenge EPA’s November 22nd final determination with respect to the Gavin Power Plant. These petitioners were consolidated by court order on February 17, 2023.

15. Sierra Club has members who live near the ash sites that are subject to EPA enforcement and has an interest in those sites being cleaned up without additional delay and in accordance with the requirements of the federal rule—that is, the implementation of clean-up plans that eliminate contamination and the design and operation of groundwater monitoring systems that accurately characterize the nature and extent of contamination. Specifically, Sierra Club has members that live near the Gavin Power Plant in Cheshire, Ohio and downriver

and downgradient from the coal ash ponds and underlying aquifers associated with Gavin.

16. A delay of coal ash pond closure in accordance with the requirements of the federal rule will cause significantly more toxic pollution to enter groundwater and surface waters, exposing Sierra Club members and wildlife to higher levels of pollution than they would otherwise be exposed to. This, in turn, will increase the likelihood that Sierra Club members will experience adverse health effects and a diminished ability to enjoy the natural resources in their communities.

17. I am familiar with the nature and scope of Sierra Club's membership programs, its membership records, and the manner in which information on members can be retrieved. Sierra Club regularly maintains membership records that include the address of each member. These records are regularly updated to add new members, reflect address changes, and remove the names of persons who are no longer members. The records are maintained on a computer database, from which I obtained and verified on March 9, 2023, the information provided below.

18. Marianne Barte is a current member of Sierra Club.

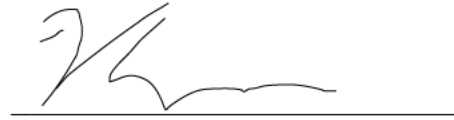
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I declare, pursuant to 28 U.S.C. § 1746, under penalty of perjury that the foregoing is true and correct.

Executed on March 15, 2023.

A handwritten signature in black ink, appearing to read 'Neil Waggoner', is written above a horizontal line.

Neil Waggoner

**IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

Electric Energy, Inc., et al.,

Petitioners,

v.

UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY and
MICHAEL S. REGAN, Administrator,
U.S. Environmental Protection Agency,

Respondents.

No. 23-1035

DECLARATION OF MARIANNE BARTE

I, Marianne Barte, do declare as follows:

1. My name is Marianne Barte. I am over 18 years of age. The information in this declaration is based on my personal knowledge or public information in government records and, if called to testify, I would testify to the facts as stated in this declaration.

2. I have been a member of the Sierra Club since 2018 and am a current member.

3. I live on Swisher Hill Road in Cheshire in Gallia County, Ohio. I have lived here since 1996.

4. My home is approximately four miles from two coal-burning power plants, General James M. Gavin Power Plant and Kyger Creek Power Plant.

5. My drinking and household water is provided by Gallia Rural Water. Based on information provided to me by Gallia Rural Water and their publicly available Consumer Confidence Report, I understand this water is sourced from groundwater from 10 wells in Gallipolis and Addison Township, in Gallia County. This groundwater is from the Ohio River Valley Aquifer. Based on publicly available information provided by the Ohio Department of Natural Resources, I understand these wells are located four to six miles downriver from coal ash ponds associated with the Gavin Power Plant.

6. Gallia Rural Water has stated that one of its well fields has a high susceptibility to contamination and had actual contamination by volatile organic chemicals in the 1990s, and the other has a moderate susceptibility to contamination due to the nature of the aquifer from which groundwater is drawn and its proximity to sources of contamination.

7. I understand that on November 22, 2022, EPA issued a final determination denying a request by Gavin's owners to delay the closure of a coal ash impoundment, called the Bottom Ash Pond, at the Gavin site. I understand this

denial was based on a number of findings, including the EPA's conclusion that a different, inactive impoundment called the Fly Ash Reservoir may contain up to 64 vertical feet of coal ash waste in ongoing contact with groundwater. I understand that the EPA also found that Gavin recorded elevated levels of certain constituents in groundwater outside the boundaries of its coal ash impoundments, including sulfate and boron, and that available evidence supports the conclusion that the source of these constituents is coal ash at the Gavin site. I understand Gavin did not perform additional testing to determine whether other constituents such as arsenic, mercury, and lead may be leaching from the coal ash impoundments into groundwater, and that Gavin should have performed this testing based on the exceedances it did record.

8. I understand that coal ash contains numerous contaminants, including mercury, cadmium, and arsenic, that can have significant and harmful impacts on human health when consumed at elevated levels.

9. I am concerned that my drinking water may contain elevated levels of harmful constituents due to contamination by coal ash from the Gavin Power Plant. I have purchased and use a water filter at home in an effort to reduce the impact of any contamination on my health, although I know the use of such filters cannot fully remove dangerous constituents. Moreover, I cannot use a water filter for

bathing or cleaning and I am concerned about exposure to coal ash constituents through these activities.

10. I also use tap water from my home for gardening and am concerned about the impact these constituents might have on plant and animal life in and around my home.

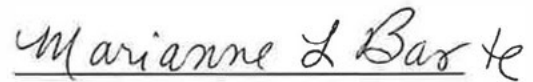
11. I understand that Gavin Power and other utilities and industry groups have filed petitions before the Court of Appeals for the District of Columbia Circuit challenging EPA's final determination denying Gavin's request for an extension.

12. I am concerned that if this petition challenging EPA's final determination with respect to Gavin is successful in reversing EPA's final determination, Gavin will continue to store coal ash in unlined impoundments at the site, including the Bottom Ash Pond and Fly Ash Reservoir, and harmful constituents from these impoundments will continue to leach into groundwater and reach the wells from which my drinking and household water is drawn. I am also concerned that if Gavin and other petitioners are successful in challenging EPA's findings as to other violations at the site, Gavin's owners will decline to take steps to increase monitoring of potential contamination from its coal ash impoundments or to excavate the coal ash currently sitting in contact with groundwater at the Fly Ash Reservoir.

13. I understand that Sierra Club is seeking to intervene in the above-captioned proceeding in support of EPA's final determination denying Gavin's request for an extension and I support such intervention.

I declare, pursuant to 28 U.S.C. § 1746, under penalty of perjury that the foregoing is true and correct.

Executed on March 15, 2023.

A handwritten signature in cursive script that reads "Marianne L Barte". The signature is written in dark ink and is positioned above the printed name.

Marianne Barte

**IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

ELECTRIC ENERGY, INC., et al.,)

Petitioners,)

v.)

**ENVIRONMENTAL
PROTECTION AGENCY and
MICHAEL S. REGAN,
Administrator, United States
Environmental Protection Agency,**)

Respondents.)

**Case No. 23-1035
(consolidated with
No. 23-1036, 23-1037,
23-1038)**

DECLARATION OF THOMAS CMAR

I, THOMAS CMAR, declare and state as follows:

1. My name is Thomas Cmar. I am a Senior Attorney at Earthjustice and outside counsel for Sierra Club in this litigation. I make this declaration based on my personal knowledge. If called as a witness, I would and could competently testify to the matters stated herein.
2. In late 2013 and early 2014, at the request of the Sierra Club, I reviewed documents posted by the Ohio Environmental Protection Agency (“Ohio EPA”) concerning a proposed renewal of the General James M. Gavin power plant’s Clean Water Act National Pollutant Discharge Elimination

System (“NPDES”) permit and prepared a letter reflecting legal and technical comments to the Ohio EPA on the proposed permit renewal.

3. On February 7, 2014, I submitted a comment letter to the Ohio EPA on behalf of Earthjustice, the Sierra Club, and the Environmental Integrity Project. A true and correct copy of that comment letter is attached hereto as Exhibit A.

I declare under penalty of perjury that, to the best of my knowledge, the foregoing is true and correct. Executed this 17th day of March 2023, in Cincinnati, Ohio.



Thomas Cmar

Exhibit A

**EARTHJUSTICE**ALASKA CALIFORNIA FLORIDA MID-PACIFIC NORTHEAST NORTHERN ROCKIES
NORTHWEST ROCKY MOUNTAIN WASHINGTON, DC INTERNATIONAL

February 7, 2014

VIA E-MAIL

Eric Nygaard
Division of Surface Water – Central Office
Ohio Environmental Protection Agency
eric.nygaard@epa.state.oh.us

Daniel Messerly
Division of Surface Water – Southeast District Office
Ohio Environmental Protection Agency
daniel.messerly@epa.state.oh.us

**RE: Comments on Draft National Pollutant Discharge Elimination System Permit
for Ohio Power Company General James M. Gavin Plant, Permit No.
1IB00006*ND**

Dear Mr. Nygaard and Mr. Messerly:

Please accept these comments submitted on behalf of Earthjustice, Sierra Club, and the Environmental Integrity Project regarding the Ohio Environmental Protection Agency's ("Ohio EPA") proposed renewal of the Clean Water Act National Pollutant Discharge Elimination System ("NPDES") permit for the Ohio Power Company General James M. Gavin Plant (hereinafter "the Plant") (OEPA Permit No. 1IB00006*ND) (hereinafter "Draft Permit").

As explained below, Ohio EPA must deny the requested permit renewal on the present record. If Ohio EPA continues to process the Draft Permit, the Agency must revise the terms and conditions of the Draft Permit substantially, and the revised draft must be re-noticed and the public must have a full and fair opportunity to comment and request a hearing on the revised draft. Pursuant to U.S. EPA regulations covering required state program elements for the issuance of NPDES permits, 40 C.F.R. § 124.17, if Ohio EPA issues a final Permit, a written responsiveness summary must be provided addressing all specific comments made in this submittal, along with all other public comments filed during the comment period.

I. Ohio EPA's proposed new water quality based effluent limits are both needed and legally required.

Although overall we have a number of concerns with Ohio EPA's proposed Draft Permit, we note at the outset our support for Ohio EPA's proposal to establish new water quality based effluent limits at several of the Plant's outfalls, including new limits on mercury, copper, selenium, ammonia-nitrogen, and Whole Effluent Toxicity. These new, more stringent water quality based effluent limits are long overdue to protect human health and the environment downstream of the Plant, and we commend Ohio EPA for moving forward with them. Based on the findings that Ohio EPA has made in connection with this Draft Permit, Ohio EPA is legally required to include these proposed new water quality based effluent limits in any final permit renewal for the Plant.

II. Ohio EPA must establish numeric effluent limits based on Best Available Technology ("BAT") for the Plant's landfill leachate discharges from Outfalls 007, 008, 009, and 010.

Sections 301 and 402 of the Clean Water Act ("CWA"), 33 U.S.C. §§ 1311 & 1342, require Ohio EPA to establish numeric effluent limitations reflecting application of Best Available Technology ("BAT") to reduce or eliminate the Plant's discharges of leachate from the landfill that receives solid waste from the Plant's Flue Gas Desulfurization ("FGD") air pollutant "scrubber" system before issuing (or renewing) any NPDES permit that authorizes such discharges. *See* 33 U.S.C. § 1311(b)(2)(A)(i) (point sources "shall" achieve "effluent limitations" that "shall require application of" Best Available Technology ("BAT") to reduce pollutant discharges to the maximum extent "technologically and economically achievable," including "elimination of discharges of all pollutants" if it is achievable); *id.* § 1342(a)(1) (requiring that NPDES permits may only be issued "upon condition that" they ensure that, *inter alia*, the requirements in 33 U.S.C. § 1311 are met). Federal regulations promulgated by U.S. EPA also require that "[t]echnology-based treatment requirements under Section 301(b) of the [CWA] represent the minimum level of control that must be imposed" in a NPDES permit. 40 C.F.R. § 125.3(a) (emphasis added). BAT is a stringent treatment standard that has been held to represent "a commitment of the maximum resources economically possible to the ultimate goal of eliminating all polluting discharges." *EPA v. Nat'l Crushed Stone Ass'n*, 449 U.S. 64, 74 (1980).

Because U.S. EPA's applicable Effluent Limitation Guidelines ("ELGs") at 40 C.F.R. Part 423 do not yet include BAT limits for FGD landfill leachate,¹ U.S. EPA regulations require

¹ When U.S. EPA last revised the Part 423 ELGs in 1982, the agency expressly noted that it was reserving "flue gas desulfurization waters" for "future rulemaking." Steam Electric Power Generating Point Source

Ohio EPA to use its Best Professional Judgment (“BPJ”) to set BAT limits for these discharges. 40 C.F.R. § 125.3(c)(2), (d) (“to the extent that EPA-promulgated effluent limitations are inapplicable,” NPDES permit writers “shall apply the appropriate factors listed in § 125.3(d)” to set case-by-case technology-based effluent limitations based on BPJ) (emphasis added); *see also* O.R.C. 6111.042 (authorizing the Director to make BPJ determinations in NPDES permits); O.A.C. 3745-33-05(A)(1)(e) (Director shall set “[a]ny more stringent limitations” in NPDES permits “required to comply with any other state or federal law or regulation”).

According to the Gavin Plant’s own measurements, the Plant’s FGD landfill leachate contains a number of pollutants, including mercury, chlorides and other dissolved solids, sulfate, selenium, arsenic, and manganese. *See* Fact Sheet at 53-55. Despite acknowledging that these pollutants will be present in FGD landfill leachate that will be discharged through Outfalls 007, 008, 009, and 010, Ohio EPA has not established any technology-based effluent limits based on BPJ in the Draft Permit for these pollutants. (Draft Permit at 10-20.) When not properly limited, these pollutants have been documented to have significant adverse effects on human health and the environment.² Indeed, there is nothing in the record indicating that Ohio EPA ever considered BAT for the Plant’s landfill leachate discharges. Although Ohio EPA erroneously states that “[i]f regulations have not been established for a category of dischargers, the director *may* establish technology-based limits based on best professional judgment (BPJ)” (Fact Sheet at 2 (emphasis added)), the CWA makes clear that permit writers *shall* apply technology based limits. 40 C.F.R. § 125.3(c)(2), (d). The use of the word “shall” in both the federal statute and

Category; Effluent Limitations Guidelines, Pretreatment Standards and New Source Performance Standards, 47 Fed. Reg. 52,290, 52,291 (Nov. 19, 1982).

² As EPA explains, even though mercury concentrations in coal plant waste can be relatively low, “mercury is a highly toxic compound that represents an environmental and human health risk even in small concentrations.” EPA, Environmental Assessment for the Proposed Effluent Limitation Guidelines and Standards for the Steam Electric Power Generating Point Source Category 3-14 (Apr. 2013), Docket No. EPA-HQ-OW-2009-0819-2260 [hereinafter EA], *available at* http://water.epa.gov/scitech/wastetech/guide/steam-electric/upload/Steam-Electric_EA_Proposed-rule_2013.pdf. Boron is rare in unpolluted water, meaning that even small concentrations can be toxic to wildlife not usually exposed to this pollutant; ingestion of large amounts of boron can result in damage to the stomach, intestines, liver, kidney, and brain, as well as low birth weights, birth defects, and developmental delays in newborn animals. Agency for Toxic Substances and Disease Registry, ToxFAQs for Boron (2010), *available at* <http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=452&tid=80>. Elevated levels of chlorides and other dissolved solids can stress aquatic organisms with potential toxic effects, have adverse impacts on agriculture and wetlands, lead to unacceptable odors and tastes in drinking water, contribute to corrosion, staining, scaling, and sedimentation, which can have a major impact on water distribution system infrastructure, and the appliances of end-users. EPA has identified many other dangerous substances in coal plant wastewater, including iron and manganese, all of which can cause adverse health impacts and harm to the environment. EA at 3-4.

regulations does not leave Ohio EPA with any discretion as to whether technology-based effluent limitations should be established. *See Bennett v. Spear*, 520 U.S. 154, 172 (1997) (the imperative “shall” makes clear that the agency action specified is obligatory, not discretionary); *see also Alabama v. Bozeman*, 533 U.S. 146, 153 (2001) (“The word ‘shall’ is ordinarily the language of command.”) (internal quotations and citations omitted). A Kentucky state court recently reaffirmed that the Clean Water Act requires state permitting agencies to set case-by-case BAT-based effluent limits for power plant FGD wastewater in the absence of applicable ELGs. *Ky. Waterways Alliance et al. v. Energy and Env’t Cabinet, Louisville Gas & Elec. Co.*, No. 11-C1-1613 (Franklin Cty. Circuit Court of Ky. Sept. 10, 2013), attached as Ex. A.

Ohio EPA’s failure to set technology-based effluent limits for FGD landfill leachate discharges in the Draft Permit is especially glaring given that U.S. EPA recently issued its own proposed rule which would establish BAT-based effluent limits for landfill leachate and other coal combustion wastewater discharges, along with guidance regarding how states should permit these discharges in the interim until the proposed rule is finalized and goes into effect. U.S. EPA’s proposed rule was published in the Federal Register on June 7, 2013. Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, 78 Fed. Reg. 34,432 (June 7, 2013). U.S. EPA’s existing power plant ELGs have not been updated since 1982, and EPA has found that they are outdated and do not adequately address toxic pollution from discharges of coal combustion wastewater. *Id.* at 34,435. Although EPA is required by a federal court consent decree to finalize new ELGs by May 2014 (*see Stipulated Extension of Consent Decree, Defenders of Wildlife v. EPA*, No. 10-cv-01915 (D.D.C. Dec. 12, 2012), *available at* http://water.epa.gov/scitech/wastetech/guide/steam-electric/upload/consentdecree_extension3.pdf), that deadline has already been extended several times and could be extended yet again. Moreover, the proposed rule makes clear that any new effluent limits that it establishes would not take effect during this NPDES permit cycle for the Plant. 78 Fed. Reg. at 34,479-80 (effluent limits established in proposed rule would apply to state permits issued after July 1, 2017). In other words, the fact that U.S. EPA has proposed a rule that would set BAT for steam electric plants on a national basis in the future does not excuse Ohio EPA from living up to its legal obligation now to set BAT-based numeric effluent limits for this Plant during this permitting cycle, in order to live up to the Clean Water Act’s requirements. *See Ky. Waterways Alliance*, attached as Ex. A, at 9-14 (ruling that Kentucky permitting agency violated the Clean Water Act by “fail[ing] to conduct a BPJ analysis for” FGD wastewater in the challenged coal plant permit; finding “no just cause for delay” in remanding; and noting that “this ruling may be superseded by a forthcoming EPA ruling applicable to scrubber wastewater. Nevertheless, this does not relieve the [agency] from complying with its obligations under the Clean Water Act.”).

Even though U.S. EPA’s rulemaking has not yet established a final set of BAT-based numeric effluent limits for FGD landfill leachate – requiring Ohio EPA to take action here – the

technical information and guidance to the states that U.S. EPA has published in connection with its rulemaking is more than sufficient to provide the information necessary for Ohio EPA to set BAT-based numeric effluent limits for the Plant in this permitting cycle. U.S. EPA's rulemaking is based in part on a comprehensive study published in 2009 of wastewater treatment technologies available to coal-fired power plants to reduce or eliminate their pollution, including a range of technology options that reduce or, in some cases, virtually eliminate pollution from FGD systems. U.S. EPA, Steam Electric Power Generating Point Source Category: Final Detailed Study Report (Oct. 2009) (describing available wastewater treatment technologies for FGD wastewater and the levels of pollutant reduction that those technologies can achieve), *available at* http://water.epa.gov/scitech/wastetech/guide/steam-electric/upload/Steam-Electric_Detailed-Study-Report_2009.pdf. Following this study, U.S. EPA issued detailed guidance outlining those technologies to assist state permitting agencies in determining BAT for coal combustion wastewater discharges on a case-by-case basis using BPJ until such time as EPA completed its rulemaking to revise the power plant ELGs. *See generally* Memorandum from James A. Hanlon of EPA's Office of Water to EPA Water Division Directors, dated June 7, 2010, at Attachment A, *available at* http://cfpub.epa.gov/npdes/docs.cfm?view=allprog&program_id=14&sort=date_published.) (outlining the types of wastewater treatment technologies plants can use to reduce pollutant levels and reinforcing that state permitting agencies "must comply with specific minimum requirements of the NPDES program," including the requirement that "an authorized state must include technology-based effluent limitations in its permits. . .").³

In addition to providing guidance to the states, U.S. EPA has also performed its own case-by-case BPJ permitting determination, proposing BAT-based effluent limits for a Public Service of New Hampshire power plant, the Merrimack Station, that provides a detailed example of how Ohio EPA should be permitting power plants under its jurisdiction. U.S. EPA Region 1, *Determination of Technology-Based Effluent Limits for the Flue Gas Desulfurization of Wastewater at Merrimack Station in Bow, New Hampshire* (Sept. 2011), *available at* <http://www.epa.gov/region1/npdes/merrimackstation/pdfs/MerrimackStationAttachE.pdf>. The Merrimack permit author examined eleven different types of wastewater treatment technologies using the BAT factors before proposing physical/chemical treatment accompanied by a

³ U.S. EPA has also repeatedly reminded state permitting bodies of their obligation to set BAT. For example, U.S. EPA Region 4 reiterated that "a NPDES permit *must* include TBELs for the FGD... as required by the CWA and implementing regulations" in several letters to the Tennessee Department of Environmental Management. *See* Letters from Christopher B. Thomas, Chief, Pollution Control and Implementation Branch, Water Protection Division, EPA Region 4, to Paul E. Davis, Tennessee Department of Environmental Protection, regarding NPDES permits for the Kingston Fossil Plant and the Gallatin Fossil Plant (Aug. 2011), attached as Exs. B and C (emphasis added).

biological treatment stage as BAT and establishing corresponding technology-based limits. *Id.* at 14-26.⁴

Ohio EPA may not lawfully renew the Gavin Plant NPDES permit until it undertakes a similar process for the Plant's FGD landfill leachate discharges from Outfalls 007, 008, 009, and 010. Ohio EPA is under a non-discretionary duty to independently evaluate the available pollutant control technologies for FGD landfill leachate, such as mechanical evaporation, physical/chemical treatment and biological treatment, and to impose permit limits that reflect the stringent nature of BAT based upon "all available information" (40 C.F.R. § 125.3(c)(2)(i)) and in consideration of the factors listed at 40 C.F.R. § 125.3(d). Even assuming *arguendo* that the current level of treatment of FGD landfill leachate at the Plant is BAT (which we do not concede that it is), at a minimum Ohio EPA must establish technology-based numeric effluent limitations based on the pollutant reductions that the Plant's existing treatment process can achieve. *See* 40 C.F.R. § 125.3(c), (d).

III. Ohio EPA Must Require Effluent Limits Based on BAT to Reduce or Eliminate Pollutants from Fly Ash Pond Runoff and Bottom Ash Transport Water Discharged through Outfalls 001 and 006.

In addition to establishing BAT-based numeric effluent limits for FGD landfill leachate from Outfalls 007, 008, 009, and 010, Ohio EPA must also establish BAT-based numeric effluent limits for the other coal combustion wastewater streams, such as fly ash pond runoff and bottom ash transport water, that require at least BAT-level treatment before they are discharged through Outfalls 001 and 006, respectively. Ohio EPA's legal requirement, described above, to establish technology-based effluent limits case by case based on BPJ applies to any wastewater stream discharged by the Plant that is not addressed by U.S. EPA's currently applicable, 1982-era ELGs at 40 C.F.R. Part 423. For coal combustion wastewater streams such as bottom ash transport water, the 1982 ELGs only include limitations on conventional pollutants Total Suspended Solids and oil & grease, based upon application of best practicable control technology

⁴ Moreover, since U.S. EPA proposed effluent limits for the Merrimack Station, Public Service of New Hampshire chose to install an even more effective wastewater treatment system at the plant: a mechanical evaporation system that achieves zero liquid discharge of pollutants. *See* Investigation of PSNH Installation and Cost Recovery of Scrubber Technology at Merrimack Station, Final Report of Jacobs Consultancy (2012), at 15-17, attached as Ex. D; PSNH Progress Report, Merrimack Station Scrubber Project, June 28, 2012, Docket No. DE 11-250, attached as Ex. E. Other power plants, including two Duke Energy power plants in North Carolina, have also chosen to install mechanical evaporation systems to eliminate FGD wastewater pollutant discharges. *See* Deposition of Thomas E. Higgins, CH2M Hill, in *Tennessee Clean Water Network v. Tennessee Dep't of Env't. & Conservation*, Case No. WPC10-0116 (Feb. 16, 2012), at 122, 134-35, attached as Ex. F; Zero-Liquid Discharge System at Progress Energy Mayo Generation Station, EPA-HQ-OW-2009-0819-1443, at page 1, attached as Ex. G.

currently available (“BPT”), per CWA § 301(b)(1)(A), 33 U.S.C. § 1311(b)(1)(A). *See* 40 C.F.R. § 423.12(b)(4). The 1982 ELGs do not address toxic pollutants, such as metals, that are found in bottom ash transport water. Thus, to the extent that toxic pollutants are present in treatable concentrations in coal combustion wastewater effluent at Outfall 002, Ohio EPA must establish TBELs to address those pollutants using its BPJ (including at an upstream internal outfall, if appropriate). *See* 40 C.F.R. § 125.3(c)(2), (d) (“to the extent that EPA-promulgated effluent limitations are inapplicable,” NPDES permit writers “*shall apply* the appropriate factors listed in § 125.3(d)” to set case-by-case TBELs based on BPJ) (emphasis added); *see also* O.R.C. 6111.042 (authorizing the Director to make BPJ determinations in NPDES permits); O.A.C. 3745-33-05(A)(1)(e) (Director shall set “[a]ny more stringent limitations” in NPDES permits “required to comply with any other state or federal law or regulation”); *Ky. Waterways Alliance*, attached as Ex. A.⁵

Ohio EPA has not incorporated technology-based effluent limits based on BPJ in the Draft Permit to reduce or eliminate pollutant discharges from fly ash pond runoff or bottom ash transport water, and nothing in the Fact Sheet indicates that Ohio EPA even considered doing so. Instead, Ohio EPA has only established technology-based effluent limits at Outfalls 001 and 006 pursuant to the minimal requirements of the 1982 Part 423 ELGs. (Fact Sheet at 76-77.)

Discharges of bottom ash transport water from Outfall 006 are particularly problematic. In the Technical Development Document published by U.S. EPA in support of its recently proposed ELG rule, U.S. EPA identifies a number of toxic metals that are likely to be present in treatable concentrations in bottom ash transport water, including arsenic, copper, lead, mercury, and selenium. Technical Development Document for the Proposed Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category at 6-29 (Apr. 2013), Docket No. EPA-HQ-LW-2008-0819-2257 [hereinafter TDD], *available at* http://water.epa.gov/scitech/wastetech/guide/steam-electric/upload/Steam-Electric_TDD_Proposed-rule_2013.pdf. Ohio EPA’s Fact Sheet accompanying the Draft Permit indicates that these same metals also appear to be present in treatable concentrations in the Plant’s wastewater at Outfall 006, where bottom ash transport water is discharged from the Plant after being mixed with rainfall and other wastewater streams (which likely dilute the pollutant concentrations from bottom ash transport water). *See* Fact Sheet at 31-32, 42, 52 (effluent characterization for Outfall 006). Ohio EPA must therefore set BAT-based numeric effluent

⁵ In several recent cases, U.S. EPA has made clear that permitting authorities must set TBELs using BPJ to address pollutants in coal combustion wastewater that are not addressed in the applicable ELGs. *See supra* note 3. More recently, U.S. EPA reiterated, in the course of reviewing eight NPDES permits for coal-fired steam electric facilities issued by the State of Maryland, that TBELs must be established on a BPJ-basis for discharges of fly ash and bottom ash transport water. *See* Letter from James Hanlon, EPA Office of Wastewater Management, to Jennifer Peterson and Diana Dascalu-Joffe, Environmental Integrity Project (Apr. 26, 2012), attached hereto as Ex. H.

limits on bottom ash transport water in the Draft Permit, applying them at an appropriate internal, upstream location prior to the bottom ash transport water's co-mingling with other wastewater streams.⁶

The record developed by U.S. EPA in support of its proposed ELG rule demonstrates that BAT for bottom ash transport water is use of a dry ash handling technology that achieves zero discharge of ash transport water. *See* Comments of 16 Environmental Organizations on Proposed Effluent Limitation Guidelines and Standards for the Steam Electric Power Generating Point Source Category, Docket No. EPA-HQ-OW-2009-0819-4684, at 52-60 (Sept. 20, 2013), attached as Ex. I, *available at* http://www.environmentalintegrity.org/news_reports/documents/EIPSierraClubEarthjusticeetalcommentsonproposedSteamElectricELGs092013_000.pdf. U.S. EPA reviewed six available technology options for eliminating bottom ash transport water discharges; these systems can be divided between systems such as mechanical and remote mechanical drag systems that use water but recycle it, and systems such as vacuum and pressure systems that use no water at all. 78 Fed. Reg. at 34,453-54. U.S. EPA estimates that 95 coal and coke units operate mechanical drag bottom ash handling systems, and U.S. EPA has identified 74 units at 19 plants that plan to convert to mechanical drag bottom ash handling systems. TDD at 7-30 to 7-31. 66 U.S. plants have installed dry vacuum systems and 11 plants have installed dry pressure systems. 78 Fed. Reg. at 34,454. EPA's record further demonstrates that these dry ash handling technologies are affordable to the industry. *See* Comments of 16 Environmental Organizations, at 52-60, attached as Ex. I.

As with landfill leachate discharges, Ohio EPA may not lawfully renew the Gavin Plant's NPDES permit until it undertakes a case-by-case analysis of BAT for bottom ash transport water based upon "all available information," 40 C.F.R. § 125.3(c)(2)(i), considers the factors listed at 40 C.F.R. § 125.3(d), and establishes numeric effluent limits that require the level of pollutant reduction (or elimination) that BAT-level treatment can achieve. As the record is clear that zero discharge technologies for bottom ash transport water are both technically feasible and affordable to industry, Ohio EPA must require that the Plant convert to dry ash handling for bottom ash and eliminate those pollutant discharges. *See* 33 U.S.C. § 1311(b)(2)(A) (Clean Water Act requires that effluent limitations "shall require the elimination of discharges of all pollutants if . . . such elimination is technologically and economically achievable"). Ohio EPA must also evaluate what level of pollutant reduction or elimination BAT-level treatment of fly ash pond runoff water (currently discharged through Outfall 001) can achieve.

⁶ *See* Fact Sheet at 9 (noting that "[f]ederal rules at 40 CFR 125.3(f) prohibit attaining [technology-based effluent limits] by dilution").

IV. The Gavin Plant's Requested Mercury Variance for Outfall 008 Must Be Denied Because the Plant Has Not Adequately Demonstrated That "There Is No Readily Available Means of Compliance Without End-of-Pipe Controls."

The Gavin Plant's requested variance from compliance with permit limitations at Outfall 008 based on Water Quality Standards ("WQS") for mercury should be denied because the company has failed to provide adequate support for the contention in its variance application that it is unable to meet the WQS without end-of-pipe treatment to remove mercury from the effluent. Not only is Ohio EPA proposing to grant the Plant a mercury variance here, the agency is proposing to require that the Plant achieve only a monthly average of 131 ng/L at Outfall 008 – a monthly average that is *over ten times* greater than the WQS of 12 ng/L. (Fact Sheet at 18-19.) Discharges of mercury at these elevated concentrations could have very serious consequences for public health and the environment in the communities downstream from the Gavin Plant.

Ohio EPA proposes to grant the Gavin Plant a mercury variance from water quality-based effluent limitations ("WQBELs") at Outfall 008 pursuant to a streamlined variance process created through a 1997 Ohio EPA rulemaking, which is now codified at O.A.C. 3745-33-07(D)(10). Specifically, Ohio EPA found in 1997 that "the average cost to reduce mercury below twelve ng/l from a waste stream through end-of-pipe treatment is in excess of ten million dollars per pound of mercury removed." O.A.C. 3745-33-07(D)(10). Further, Ohio EPA found in 1997 that "requiring removal of mercury by construction of end-of-pipe controls to attain mercury WQS [that are] more stringent than those required by sections 301(b) and 306 of the [federal Clean Water Act] would result in substantial and widespread social and economic impact." *Id.* Accordingly, Ohio EPA established by rule in 1997 that it may grant a variance from WQBELs for mercury where "the permittee is not currently complying with the WQBEL and information available from the application required in paragraph (D)(10)(b) of this rule indicates that there is no readily apparent means of complying with the WQBEL without constructing end-of-pipe controls more stringent than those required by sections 301(b) and 306 of the [federal Clean Water Act]," *id.* 3745-33-07(D)(10)(a)(ii), and "the discharger is currently able to achieve or projects that it can achieve an annual average mercury effluent concentration of twelve ng/l within five years of the date that the variance is granted," *id.* 3745-33-07(D)(10)(a)(iii).

The 1997 mercury variance rule as codified clearly places the burden of proof on the permit applicant to provide information, in its application, regarding "whether there are other means by which the permittee could comply with the WQBEL without constructing end-of-pipe treatment." O.A.C. 3745-33-07(D)(10). Although the 1997 mercury variance rule has been approved by U.S. EPA as part of Ohio's federally delegated Clean Water Act NPDES program, U.S. EPA has specifically noted that, while "Ohio's mercury variance relieves individual dischargers of the responsibility to demonstrate social and economic impacts of complying with

the mercury criteria[,] [i]ndividual dischargers must still demonstrate that end of pipe treatment is the only viable compliance option.” Water Quality Criteria: Notice of Availability of Water Quality Criterion for the Protection of Human Health: Methylmercury, 66 Fed. Reg. 1344, 1350-51 (Jan. 8, 2001).

The 1997 mercury variance rule further provides that, in the absence of an adequate demonstration by the permit applicant that there are no available means of compliance without end-of-pipe controls, Ohio EPA “shall deny” the mercury variance application. O.A.C. 3745-33-07(D)(10)(c) (emphasis added). U.S. EPA concurs with this interpretation of the rule, having noted that “[w]here the discharger demonstration is inadequate (including an inadequate demonstration that end of pipe treatment is the only readily available option for complying), Ohio denies the applicability of the mercury variance to the individual discharge.” 66 Fed. Reg. at 1351.

The Gavin Plant has not adequately demonstrated here that there are no available means of compliance without end-of-pipe controls. Such a demonstration would necessarily be predicated on a finding that the Plant’s current treatment process is consistent with the Best Available Technology requirements of Section 301(b) of the Clean Water Act, but as noted above in Part II of these comments, neither Ohio EPA nor the Plant appears to have made any attempt to evaluate what level of pollution reduction (or elimination) could be achieved through BAT-level treatment of the Plant’s FGD landfill leachate. Ohio EPA’s proposal to approve this mercury variance is thus fundamentally flawed, because the Plant has not provided an adequate showing that alternative technologies for treatment of landfill leachate are not available – including an evaluation of the same technologies described above in Part II of these comments that should have been considered in connection with a review of BAT to treat the Plant’s landfill leachate. As noted above, these more advanced wastewater treatment technologies include technologies that could achieve zero liquid discharge of landfill leachate. Moreover, many of these alternative technologies would fall outside the scope of Ohio EPA’s 1997 rulemaking, as they would entail process changes and/or treatment of landfill leachate upstream of the final outfall rather than “end-of-pipe controls.” Further, it is our understanding that, other than observing a few pilot projects, little to no evaluation of mercury control technologies, either at end-of-pipe or at internal treatment points, has been undertaken by Ohio EPA since 1997. Whether or not the 1997 rulemaking was based on valid information and assumptions at the time, in light of the availability of new information and the 1997 rulemaking’s lack of focus on mercury controls upstream of the end-of-pipe, the 1997 rulemaking does not provide an adequate factual basis for Ohio EPA to grant the Gavin Plant a mercury variance for its FGD landfill leachate discharges today. Instead, Ohio EPA must require the Plant to comprehensively evaluate alternative technologies before it can lawfully approve a mercury variance for Outfall 008.

V. Conclusion

For at least the foregoing reasons, Ohio EPA must either deny the application for renewal of the Gavin Plant's NPDES permit, or at a minimum substantially revise the Draft Permit and provide the public with a new opportunity to review and comment on it. If you have any questions, please contact Thomas Cmar at 312-257-9338 or tcmar@earthjustice.org.

Thank you for the opportunity to comment.

Sincerely,



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